

**Pipeline Primary CR Knee System  
510(k) Summary - K113122**

**Device Proprietary Name:** Pipeline Primary CR Knee System

**Common Name:** Total Knee System

**Classification regulation:** 888.3560 (implants/instruments)

**Device Class:** Class II

**Product Codes:** JWH (cemented knees)

**Submitter's Name:** Pipeline Orthopedics

**Address:** 3 Wing Drive, Suite 200, Cedar Knolls, NJ 07927

**Contact Person:** Robert C. Cohen

**Telephone Number:** (973) 267-8800

**Fax Number:** (973) 267-8810

**Date Summary Prepared:** February 16, 2012

**Device Description:**

The Pipeline Primary CR Knee System includes components designed for total knee replacement. The system includes femoral components, tibial inserts, tibial trays, patellar components and surgical instrumentation.

The Pipeline CR Total Knee System femoral component, when used with the Pipeline CR articular surfaces, is designed to achieve flexion at high angles and provide a clinical ROM up to 150 degrees.

**Intended Use:**

The Pipeline CR Total Knee System components are indicated for use in skeletally mature individuals, with severe knee pain and disability, with an intact posterior cruciate ligament, undergoing total knee replacement due to:

- Osteoarthritis, rheumatoid arthritis, post-traumatic arthritis, moderate deformities and femoral condyle osteonecrosis.
- Failed osteotomies, failed partial knee replacement, or failed prior total knee replacement whose age, weight and activity level are compatible with an adequate long-term result.
- Post-traumatic loss of joint configuration, particularly when there is patellofemoral erosion, dysfunction or prior patellectomy.
- Moderate valgus, varus, or flexion deformities.

Pipeline CR Total Knee System components are indicated for use only with cement and are single use devices.

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## Pipeline Primary CR Knee System 510(k) Summary - K113122

### **Predicate Devices:**

The Pipeline Primary CR Knee System is similar to several predicates including the following.

Trade/Proprietary Name	Manufacturer	510(K) #	Clearance Date
NexGen Complete Knee Solution Cruciate Retaining (CR)-Flex Femoral Components	Zimmer	K023211	10/17/2002
Gender Solutions Natural-Knee Flex System	Zimmer	K073286	03/07/2008
Triathlon Cruciate Retaining (Cr) Total Knee System	Stryker	K040267	5/5/2004

### **Technological Characteristics:**

The metals and standard UHMWPE material from which the components are manufactured are the same materials used in the predicate knee systems and comply with applicable implantable materials standards. A comparison of design features of the Pipeline Primary CR Knee System to the predicate knee systems and performance testing confirm that the Pipeline Primary CR Knee System is capable of withstanding the anticipated physiological conditions associated with the indications for use and is substantially equivalent to the predicate devices.

### **Substantial Equivalence Information:**

The Pipeline Primary CR Knee System is similar to legally marketed devices listed previously in that they share similar indications for use and incorporate similar technological characteristics. All evaluations determined that the Pipeline Primary CR Knee System is substantially equivalent to the predicate devices.



## DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Food and Drug Administration  
10903 New Hampshire Avenue  
Document Control Room -WO66-G609  
Silver Spring, MD 20993-0002

Pipeline Orthopedics, Incorporated  
% M Squared Associates  
Ms. Terry Sheridan Powell  
Consultant  
901 King Street, Suite 200  
Alexandria, Virginia 22314

MAR 20 2012

Re: K113122

Trade/Device Name: Pipeline Cruciate Retaining (CR) Primary Knee System

Regulation Number: 21 CFR 888.3560

Regulation Name: Knee joint patellofemorotibial polymer/metal/polymer semi-constrained cemented prosthesis

Regulatory Class: Class II

Product Code: JWH

Dated: March 16, 2012

Received: March 19, 2012

Dear Ms. Powell:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration. Please note: CDRH does not evaluate information related to contract liability warranties. We remind you, however, that device labeling must be truthful and not misleading.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

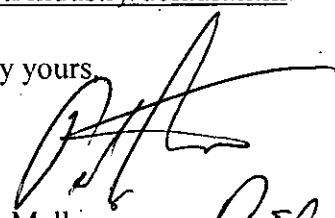
Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21

CFR Part 807); labeling (21 CFR Part 801); medical device reporting (reporting of medical device-related adverse events) (21 CFR 803); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please go to <http://www.fda.gov/AboutFDA/CentersOffices/CDRH/CDRHOFFICES/ucm115809.htm> for the Center for Devices and Radiological Health's (CDRH's) Office of Compliance. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to <http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm> for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address <http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm>.

Sincerely yours,

  
Mark N. Melkerson  
Director  
Division of Surgical, Orthopedic,  
and Restorative Devices  
Office of Device Evaluation  
Center for Devices and  
Radiological Health

*Mark N. Melkerson*

Enclosure

## Indications for Use Statement

**510(k) Number:** K113122

**Device Name:** Pipeline Primary CR Knee System

**Indications for Use:** The Pipeline CR Total Knee System components are indicated for use in skeletally mature individuals, with severe knee pain and disability, with an intact posterior cruciate ligament, undergoing total knee replacement due to:

- Osteoarthritis, rheumatoid arthritis, post-traumatic arthritis, moderate deformities and femoral condyle osteonecrosis.
- Failed osteotomies, failed partial knee replacement, or failed prior total knee replacement whose age, weight and activity level are compatible with an adequate long-term result.
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Prescription Use X

AND/OR

Over-The-Counter Use \_\_\_\_\_

(Part 21 CFR 801 Subpart D)

(21 CFR 807 Subpart C)

(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF NEEDED)

Concurrence of CDRH, Office of Device Evaluation (ODE)

  
(Division Sign-Off)  
Division of Surgical, Orthopedic,  
and Restorative Devices

510(k) Number K113122